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BY

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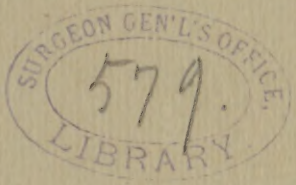

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ON PURPURA HÆMORRHAGICA.*

By LEONARD WEBER, M. D.

THE paper on purpura hæmorrhagica which I have the pleasure of reading before you this evening is based upon the clinical observation of two interesting cases, by which I hope to show that this aggravated form of purpura, first described by Werlhof in 1775, depends upon a most singular and transitory hæmorrhagic diathesis, either caused by infection from without or, as my own cases may prove, from within, and that, by its sporadic and, so to speak, spontaneous occurrence, it is already differentiated from scurvy, hæmophilia, and such efflorescences of purpura or petechiæ as develop sometimes in the course of certain acute and chronic disorders—*i. e.*, symptomatic purpura.

The main signs are hæmorrhages into the tissues of skin and mucous membranes as well as bleeding of their free surfaces, and in very severe cases hæmorrhagic exudates in the serous cavities; relapses are frequent. In ordinary purpura the petechial exanthema is generally

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small and not extensive, hæmorrhages or bloody exudates are absent, but relapses are equally frequent, and the course of the disorder is often protracted. With or without general premonitory symptoms numerous petechiæ appear upon the surface, generally many more on the lower than the upper half of the body.

The eruptions are like those of purpura, but larger, often confluent into large ecchymotic patches, usually level with the skin, though in the case of S. a good many showed a little above its level. After successive eruptions the whole body assumes a speckled appearance, with colors ranging from purple to yellow.

Sooner or later, sometimes at the very beginning, as the first prominent symptom of the disease hæmorrhage into the tissues of skin and mucous membranes and bleeding from the free surface of the latter take place. There may be severe epistaxis, hæmatemesis, hæmoptysis, hæmaturia, melæna, and uterine hæmorrhage. Cases like the one recently reported by Dr. Moscowitz, with large hæmothorax or hæmopericardium or sanguinolent exudates in the peritonæum, are unusually severe and very rare.

High temperature is usually absent, but there is often a little fever. There is neither much suffering nor general disturbance when the patient has previously been robust, and the disease runs its course without serious loss of blood, and convalescence may be looked for within three to five weeks. It is different, however, when severe hæmorrhage occurs, or a large hæmothorax is produced, as in Dr. Moscowitz's case. Then we shall have the symptoms of severe anæmia and prostration with dropsical swellings and eventual collapse that may even terminate fatally. Though such collapse will cause

much anxiety to the physician as well as the patient's friends while it lasts, it is well for us to bear in mind that we can generally overcome the threatening symptoms by the liberal use of excitants, with saline injections, rectal or hypodermic. Cases of this kind, like some of typhoid with similar symptoms, are often amenable to proper stimulating treatment, and allow us to say words of hope and confidence to the anxious friends. But they are also of considerable scientific interest, inasmuch as they show that we are able to re-establish the almost abolished circulation in and function of the central nervous system by the free and protracted use of excitants, and so preserve the life of vital organs. By the free use of excitant drugs I mean here the half-drachm doses of hypodermics of ten-per-cent. solutions of oleum camphoratum or caffeine and sodium salicylate.

That such cases require a much longer time to recover in than the ordinary ones is self-understood.

Occasionally "urticaria" runs along with or complicates purpura; it was so in S.'s case, but it gave no particular trouble. In the autopsies of purpura hæmorrhagica, ecchymoses and erosions of mucous and serous membranes in the various organs may be seen, also hæmorrhagic infiltrations, but exudates are rare. Inflammatory changes and fibrinous deposits, as in scurvy, are here absent; the spleen has been found enlarged sometimes; specific alterations of the blood or capillaries or smaller vessels have not been demonstrated, so far as I am aware. By the high fever and other symptoms that accompany typhoid and hæmorrhagic variola and scarlatina, it will probably be easy enough to distinguish these from hæmorrhagic purpura.

It is to scorbutus, perhaps, that Werlhof's disease bears

the greatest resemblance, and there have been some who have called it acute scurvy. But the hæmorrhagic inflammation and ulceration of the gums, pathognomonic of scurvy and the primary symptom, is always absent in purpura; besides, the latter occur in persons who have previously been healthy or nearly so, while scurvy is a more or less chronic cachexia affecting persons who are poorly fed and in bad conditions and surroundings.

With regard to the ætiology of the disease, I regret to say that we are considerably in the dark as yet, though it seems to be a well-observed fact that the disease is relatively frequent in the convalescent period of acute infectious diseases, particularly typhoid. It has been seen more often in young than in old persons, and women appear to be more frequently affected than men.

From my own observation of various cases of purpura, I am inclined to agree with Professor Immerman, who considers ordinary forms of purpura simplex to be the rudimentary, and purpura hæmorrhagica the aggravated, form of Werlhof's disease, both being the same in kind, but differing in degree.

If the toxines of indigestion can induce an attack in a person who is afflicted with a constitutional disorder like diabetes, then the case of patient G. S. has significance in that direction; my second case, that of B. C., had a previous uncertain history of malaria, but the patient had a mouth full of decayed teeth, from which direct and indirect infection of the system may have taken place. She has had three attacks in the course of three years, the last one without hæmorrhage. In the case seen by Dr. Moscowitz the patient had had about half a dozen attacks of gonorrhœa, which may have run him down and produced a predisposition to purpura.

With a generally favorable prognosis we may institute treatment with confidence. Rest in bed; careful guarding against all traumatic influences; good, plain diet; cool, light drinks; no stimulants except when specially indicated, and thorough evacuation and regulation of bowels are the main things.

Of liquor ferri sesquichlorati, five drops several times daily, I believe to have seen good effects in both cases. Fluid extract of hydrastis in hæmorrhage has been found useful by some observers. Severe epistaxis and other hæmorrhages that can be controlled must be treated by the usual topical applications. In collapse, stimulants and excitants as mentioned above.

I will now proceed to report briefly three cases, two of my own and another by Dr. Moscowitz, of this city.

Case I.—C. S., aged fifty-two years, married, merchant, father of healthy children; no hereditary or acquired taint. Severe case of typhoid about twenty years ago; thrombosis of certain veins of lower extremities followed by development of varicose veins, which he keeps under control by wearing stockinet bandages, and is perfectly comfortable in that way, being able to be about the greater part of the day. He is quite stout, not gouty, but for about five years has been afflicted with glycosuria, his urine generally showing one to two per cent. sugar when he does not observe careful diet, going up to five per cent. when he indulges. S. presented himself first on January 3, 1896, on account of slight tonsillitis, that passed off within two days. January 7th, about three days after some very great indiscretion in eating and drinking, followed by the usual discomforts of indigestion on the part of stomach and bowels with slight temperature, he observed small and large purpura spots on inner sides of both thighs, and remembered to have had a slight attack of purpura, accompanied by rheumatoid pains, some six or seven years

before. The next and following day the disease spread rapidly over lower extremities, abdomen, and back, the efflorescences literally covering the entire back, and confluent in many places, with many hæmorrhagic infiltrations of the cutis. In the second week the disease invaded arms and chest and face, but less so than below; however, in reaching the conjunctivæ, it came to considerable bloody suffusions and œdema palpebrarum, and during the night of the twelfth day acute auricular hæmatoma developed, causing some discomfort. While there had not been any troublesome symptoms thus far and very little fever, there was much more discomfort when the eruptions appeared in the mouth. They occasioned some surface bleeding and considerable œdema of soft palate and surrounding parts, interfering to a slight extent with the patient's respiration. There never was hæmatemesis or melæna; the loss of blood from the mouth was trifling. Appetite rather good, bowels constipated; urine contained six per cent. sugar at the outset of sickness, but by strict diet soon was brought down to less than one per cent.

There being considerable circumarticular pains and some œdema of both knees at the beginning of the illness, he was ordered fifteen-grain doses of salicylate of sodium four times a day during the first week. It did no good as to relieving these symptoms, and, the disease spreading rapidly and increasing in severity, he was given five drops of the liquor ferri sesquichlorati every three hours during the day from January 15th to February 5th, and less often after that up to March 1st. About February 27th patient appeared to be over the attack, but February 3d a relapse set in, much less severe than the first attack. In the second week of March all symptoms had disappeared.

Between the 20th and 30th of January I observed an intervening attack of acute urticaria which annoyed him considerably while it lasted. For nearly three weeks the patient had to be kept in bed, and three weeks more in his room.

April 17th I saw him last, when his urine showed just a trace of sugar. For some weeks he had been taking elixir ferri and citrate of quinine, and was then preparing to go to Europe for recreation. He is reported to be in good health now and fully able to attend to his business, which necessitates frequent and extensive traveling.

(Photographs of the patient were shown.)

Case II.—Bridget C., aged twenty-four years, single, servant, no hereditary or acquired taint; came to me first January 7, 1895, and said that she had been two years in this country; lived during the last two summers with a family in the Highlands of the Hudson. Had malaria there, and believed she had it now, though no enlargement of spleen could be demonstrated. About a year ago had purpura of skin and mucous membrane of mouth, with considerable bleeding from the mouth—probably from the gums; was in hospital for four weeks; took ergot while there. She had now some purpura spots with light symptoms of general malaise. All the patient's molar teeth were in a bad state of decay; gums somewhat swollen and bleeding on slight provocation, as in scurvy, but there was no ulceration of them; patient's general condition and nutrition good enough. Excluding malarial poison as the possible cause of purpura, I considered it probable that the bad condition of her teeth gave rise to direct and indirect infection of the blood, and the production of such toxines as might be inducing the disease in question. I had to send the patient to the hospital again a few days after her visit, to be taken care of for two weeks. She did not lose much blood during this attack. Two weeks ago she came to my office again with slight purpura of face and arms; mouth and gums not affected. I insisted upon her going to a dentist to have stumps removed and such other dental work done as might eliminate all further infection from this source.

Case III.—Dr. Moscowitz presented a patient with the history of purpura hæmorrhagica before the German Medical Society of this city at their regular meeting in

November, 1896. A man, aged thirty-three years, whose father died of carcinoma ventriculi, had no history except frequent gonorrhœa; last attack in April, 1896. Purpura spots in June with considerable hæmaturia on June 20th that passed off quickly. On July 4th he felt well enough to attend a baseball game. Taken with fainting fit and severe pain in left thorax while on the grounds. Acute development of enormous hæmothorax on left side with severe collapse symptoms. July 5th, also the signs of air in thorax, besides the blood. Some hæmatemesis during the following days; apathetic condition, slight fever.

July 15th.—Removal of eight pints of bloody fluid, mixed with air, by aspirator.

August 12th.—Another pint of the same fluid was taken away. Gradual recovery, interrupted only by slight epistaxis.

With regard to the presence of air in the thoracic cavity, Dr. Moscowitz is of the opinion that there must have been some purpura efflorescences over the left pulmonary pleura, one or the other of which led to a slight laceration of the surface of the lung and the subsequent escape of air. There being no previous history of any lung disease whatever in the case, this explanation appears to be satisfactory.

No one so far has demonstrated a germ pathogenic of purpura, or found out the particular toxines which in a previously healthy individual will induce the peculiar blood or vascular or nerve change that will produce the disease. Nevertheless, we are pretty well agreed that some intoxication of the system from within or without must take place in order that such remarkable tissue alterations may be made. I do not believe that glycosuria had much to do with Mr. C. S.'s purpura, for among more than sixty cases of glycosuria and diabetes which

I have observed I failed to notice a predisposition to well-marked purpura in such patients. But the debauch he had been guilty of a few days before the attack occurred may have been productive of gastro-intestinal ptomaines that had sufficient virulence to cause the disease in a person who was evidently predisposed to it. Again, Bridget C. has had unusually bad teeth and more or less diseased gums for years, was not able to masticate her food, and swallowed for a long while quantities of purulent and putrid material with the food with which to produce chronic self-infection.

Case III shows nothing but a history of frequent gonorrhœas. None of the cases related go to prove that the supposed auto-infection was the cause *per se* of purpura, and we are obliged to make use again of the old makeshift predisposition as a *sine qua non* in considering the value of other and direct influences.

As to names, forms, and kinds of purpura, I really believe them to be one in nature but different in degree. We may and probably will go on speaking of purpura rheumatica, though rheumatism has nothing to do with it, and the disease is not influenced by salicylates or alkaline treatment. Articular and circumarticular pain and swelling, due to acute œdema of integuments, etc., are often seen in simple purpura, and it is probably these that have given rise to the supposition of rheumatism being connected with purpura. With the names simple, petechial, and hæmorrhagic purpura the entire field can be covered, I think.

Purpura patients may have been previously well, and again may have some diathesis and been exposed to depreciating and reducing influences for a time. No characteristic changes in heart or vessels or nerves have been

found, nor is it likely that we shall make much progress that way so long as we know nothing of its pathogenesis. It is pleasant to know that the prognosis of the disease is good, and that even in such desperate cases as No. 3 life need not be despaired of. Cases like that, also Case I, show how important it is to keep the patient quiet in his bed and his room until the attack has passed off.

In a severe hæmorrhagic case I should prefer the use of liquor ferri sesquichlorati to that of any other remedy.

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